



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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MEMORANDUM

Subject: Registration Review – Addendum to the Problem Formulation for Ecological Risk, Environmental Fate, Endangered Species, and Drinking Water Assessments for Trichlorfon

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[Handwritten signatures and dates: "Melby 3-12-09" and "K. Garber 3/12/09"]

Through: Elizabeth Behl, Chief
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This memorandum amends the preliminary problem formulation for the ecological risk assessment to be conducted as part of the registration review of the insecticide trichlorfon. The following additional data are expected to be required in order to complete registration review for trichlorfon:

Acute avian inhalation study for the trichlorfon degradate dichlorvos (DDVP).

Study Title: Acute Avian Inhalation Toxicity Test
Rationale for Requiring the Data
Given that volatilization (vapor pressure = 1.2×10^{-2} mm Hg) is expected to be the main route of dissipation for DDVP in the environment and that DDVP is very highly toxic to avian species on an acute oral basis $LD_{50} = 8.8$ mg/kg-bw a.i., there is uncertainty associated with the potential risks to birds through the inhalation route of exposure. An acute avian inhalation study would address some uncertainties with this potential risk.
Practical Utility of the Data
<p>How will the data be used?</p> <p>Acute avian inhalation toxicity data will be used to identify potential risks to birds from acute exposure to DDVP from the use of trichlorfon. The data will reduce uncertainties associated with the current risk assessment for birds and will improve the Agency's understanding of the potential effects of trichlorfon on terrestrial species. If acute inhalation toxicity data are not submitted for birds, risk associated with acute inhalation exposure to DDVP from the use of trichlorfon will be assumed.</p> <p>How could the data impact the Agency's future decision-making?</p> <p>If future endangered species risk assessments are performed without these data, the Agency would have to assume that trichlorfon "may affect" listed avian species directly and use of trichlorfon and its formulated products may need to be restricted in areas where listed species could be exposed. The lack of these data will limit the flexibility the Agency and registrants have in coming into compliance with the Endangered Species Act and could result in use restrictions for trichlorfon use that are unnecessarily severe.</p>